

DERWENT-ACC-NO: **1978-55727A**

DERWENT-WEEK: 197831

COPYRIGHT 2008 DERWENT INFORMATION LTD

TITLE: Moulding sand prodn. by coating refractory  
particles with  
aq PVA soln.

PATENT-ASSIGNEE: HITACHI LTD[HITA]

PATENT-FAMILY:

|                             |               |          |
|-----------------------------|---------------|----------|
| PUB-NO                      | PUB-DATE      | LANGUAGE |
| <b><u>JP 53071626 A</u></b> | June 26, 1978 | JA       |

APPLICATION-DATA:

|                  |                 |               |
|------------------|-----------------|---------------|
| PUB-NO           | APPL-DESCRIPTOR | APPL-NO       |
| APPL-DATE        |                 |               |
| JP 53071626A     | N/A             | 1976JP-146489 |
| December 8, 1976 |                 |               |

INT-CL-CURRENT:

|      |          |          |
|------|----------|----------|
| TYPE | IPC      | DATE     |
| CIPP | B22C1/02 | 20060101 |
| CIPS | B22C1/10 | 20060101 |

ABSTRACTED-PUB-NO: JP 53071626 A

BASIC-ABSTRACT:

Aq. soln. of PVA is added to refractory particles and the mixt. is dried to form a PVA coating on each refractory particle. The resultant poly coated sand is used as a moulding sand.

In an example, 65 mesh silica sand 6 pts. wt. and 150 mesh silica sand were mixed and 10% PVA aq. soln. was added to the silica sand in amount of 5 wt. %. the mixture was well kneaded to coat the silica sand surfaces with PVA soln. The mixture was then passed through a rotary kiln kept at 70 degrees C to evaporate the moisture.

Resultant moulding material was mixed with water or alcohol for use. The strength, surface stability and residual strength of the mould formed were 40.0 kg/cm<sup>2</sup>, 97.0% and 0 kg/cm<sup>2</sup>, respectively.

TITLE-TERMS: MOULD SAND PRODUCE COATING REFRACTORY PARTICLE AQUEOUS  
PVA  
SOLUTION

ADDL-INDEXING-TERMS:  
POLYVINYL ALCOHOL

DERWENT-CLASS: A14 A81 M22 P53

CPI-CODES: A10-E09B; A12-A02; M22-A; M22-D;

POLYMER-MULTIPUNCH-CODES-AND-KEY-SERIALS:  
Key Serials: 0231 2007 2427 2440 2509 2682 2729 2750  
Multipunch Codes: 04- 231 244 245 398 431 445 477 57- 609 623 629 632